

AutoCAD Drawing files for Kentucky 7.5 Minute Digital Raster Graphics AutoCAD Release 14 / LT97 and Up

The availability of predefined AutoCAD DWG files containing Digital Raster Graphics of 7.5 minute USGS topographic quadrangles now allows users of AutoCAD, AutoCAD LT, and other CAD software packages capable of reading Release 14 DWG files to utilize free downloadable DRG's that are georeferenced to Kentucky NAD83 North or South Zone, US Survey Feet.

To utilize these files, the user must first acquire the corresponding DRG GeoTIFF's from the respective state plane coordinate zone (North or South). Since there are several DRG panels available in both zones, care must be taken to assure that the proper DRG is acquired for the corresponding DWG file. For example, DWG panel **H55.dwg** from the South Zone ZIP catalog (**KY83South_DRG.dwg.zip**) must be used in conjunction with the **H55.tif.zip** downloaded from the South Zone DRG link or FTP directory.

There are two ways to utilize DRG-DWG files. You can open a DRG-DWG panel directly to view and work with the georeferenced DRG, or you can insert / XREF a DRG-DWG panel into another drawing in order to view and work with a DRG mosaic. The latter method requires that all files be inserted at the origin (0,0,0) in order to preserve their respective georeferenced positioning. The last step for both methods requires that the user invoke the **IMAGE** command in AutoCAD to redefine the folder containing the respective DRG image TIF file and reload all defined images.

EXAMPLES:

For the following examples, the user has downloaded and extracted the **H55.tif.zip** DRG file from the South Zone FTP directory and the **H55.dwg** file from the South Zone ZIP catalog. Both files have been extracted to the **d:\ky-drg** directory. The following steps in AutoCAD are taken:

Method 1: Viewing the DRG directly in the corresponding DWG file:

1. Execute AutoCAD and open the **H55.dwg** file.
2. Invoke the **IMAGE** command and select H55 in the image dialogue (Fig. 1).
3. Click on the **Browse** button and navigate to the **H55.tif** file (Fig. 2).
4. Click on the **Save Path** and **Reload** buttons.
5. Click the **OK** button.

The DRG image should now be loaded and visible in the proper position.

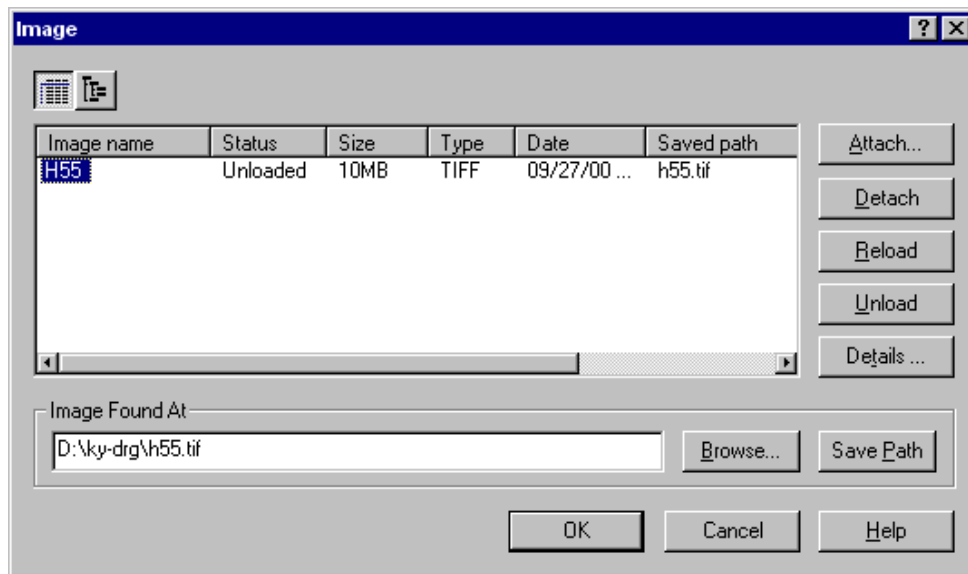


Fig.1 - AutoCAD Image Command Dialogue.

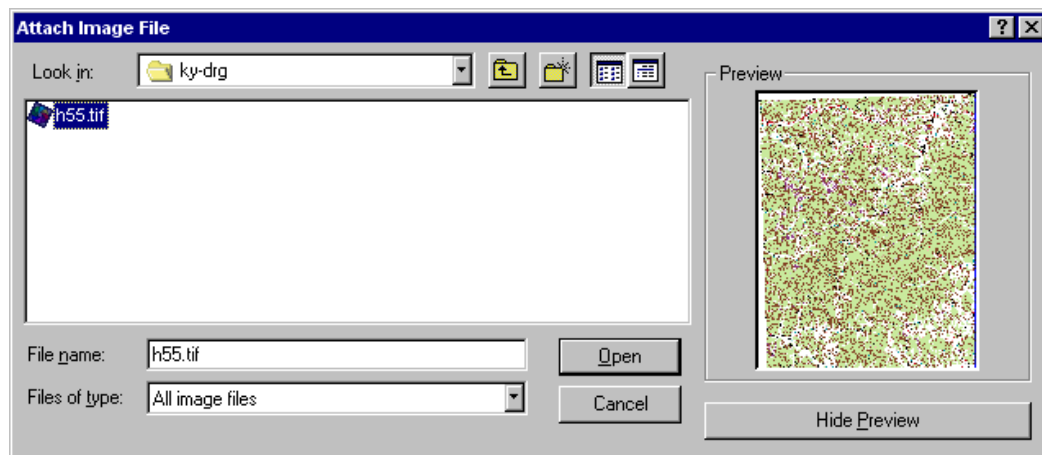


Fig. 2 - Attach Image File Dialogue

Method 2: Importing the DRG into a separate DWG file:

1. Execute AutoCAD and start a new file or open an existing file.
2. Invoke the **INSERT** command in AutoCAD 2000 or the **DDINSERT** command in AutoCAD R14 (Fig. 3) and navigate to **h55.dwg** in the select file dialogue (Fig. 4). This example may also be applied to the **XREF** command as well.
3. Set the insertion parameters so that the file inserts at the origin (0,0,0) at a scale factor of 1, with no rotation (Fig. 3). In the case of block inserts, exploding during the insertion process is optional.
4. Click the **OK** button.

5. Invoke the **IMAGE** command and select H55 in the image dialogue (fig. 1).
6. Click on the **Browse** button and navigate to the **H55.tif** file (fig. 2).
7. Click on the **Save Path** and **Reload** buttons.
8. Click the **OK** button.
9. Invoke the **Zoom, Extents** command in necessary.

The DRG image should now load and become visible in the proper position.

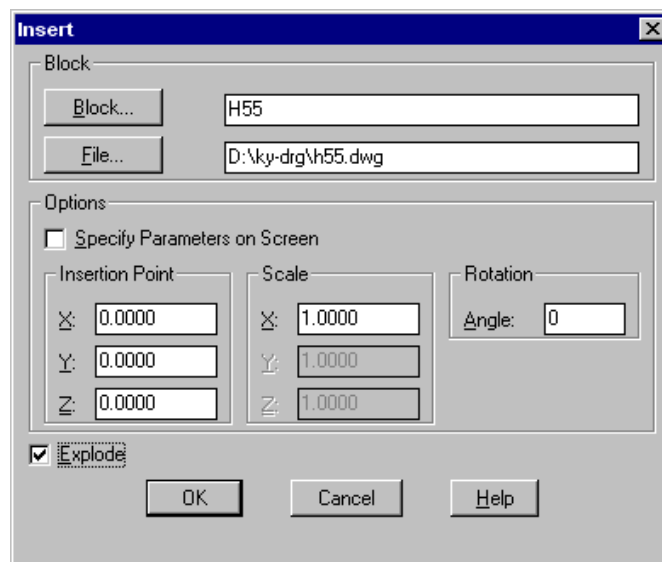


Fig 3. - AutoCAD R14 **DDINSERT** Dialogue

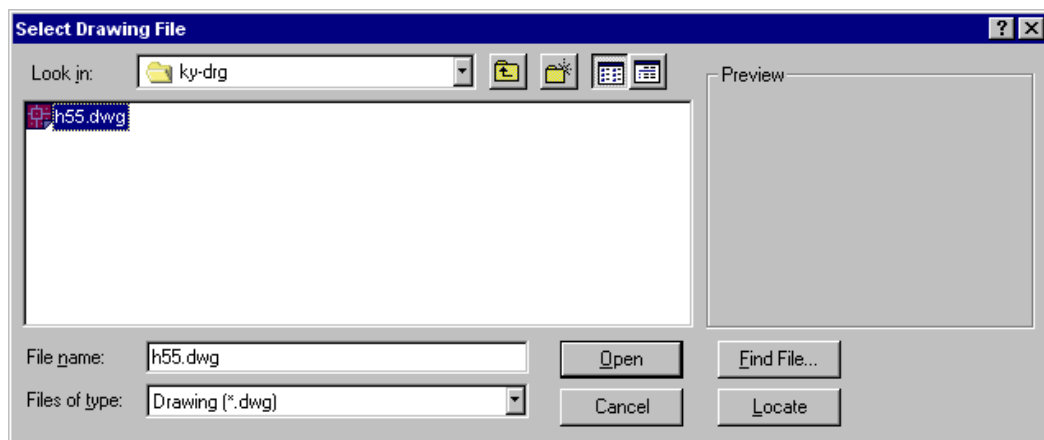


Fig 4. - AutoCAD R14 Insert File Dialogue